

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Natarajan et al.	Art Unit	: 1762
Serial No.	: 10/676,434	Examiner	: Michael Cleveland
Filed	: September 30, 2003	Conf. No.	: 7054
Title	: SOLVENT MIXTURES FOR AN ORGANIC ELECTRONIC DEVICE		

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO ACTION OF FEBRUARY 7, 2007

In reply to the Office Action of February 7, 2007, Applicant submits the following remarks. Applicant respectfully requests reconsideration in view of these remarks.

Lyon

Claims 1-5, 8-9, 15-16, 28-33, 35, 38-39 and 51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 02/069119 ("Lyon"). The applicant respectfully disagrees.

Claim 1 is directed to a method comprising depositing an organic polymer solution on the first electrode, wherein the solution includes a first solvent, at least one organic polymer, a second solvent and a third solvent, the first solvent has a high solubility and a faster evaporation rate than the second solvent, the second solvent has a very low solubility, and the third solvent has a surface tension less than 30 dynes/cm and is less than about twenty weight percent of the solution. Claim 28 is directed to a method of forming an organic polymer layer comprising mixing a first solvent, second solvent and third solvent with an organic polymer. The three solvents have the characteristics described above.

The Examiner argues that “it would have been obvious to one of ordinary skill in the art at the time of invention to have used 20 weight percent of xylene” (Office Action, Page 3). The Examiner relies on Lyon’s teaching that a first solvent can be a mixture of two different solvents (page 3). However, the Examiner is confusing Lyon’s first and second solvents with the first and second solvents of applicant’s claims. Lyon describes the first solvent as having a relatively high boiling point (Lyon, page 3). A solvent with a high boiling point would have a slower evaporation rate when compared to a solvent with a lower boiling point. Thus, Lyon suggests

that one might use a mixture of two different solvents for the slow evaporation rate solvent. In Lyon's exemplary blend on page 8, xylene makes up 40 vol.% and has a boiling point of 138°C, lower than either of 1,2,4-trimethylbenzene (b.p.: 168°C) or 3-isolpropylbiphenyl (b.p.:295°C), and thus in this mixture would not be a solvent with a relatively high boiling point (Lyon, page 8). Xylene would not be part of Lyon's first solvent, which has a relatively high boiling point.

Therefore, applicant submits that the Examiner's reason for why a person of ordinary skill in the art would modify any of the solutions described therein and to use xylene as the first solvent is not accurate, but rather is based on a misreading of Lyon. Because the Examiner has misread Lyon and a person of ordinary skill in the art would not be motivated by Lyon to form a solution with a first solvent, at least one organic polymer, a second solvent and a third solvent, where the first solvent has a high solubility and a faster evaporation rate than the second solvent, the second solvent has a very low solubility, and the third solvent has a surface tension less than 30 dynes/cm and is less than about twenty weight percent of the solution, applicant submits that no *prima facie* case of obviousness has been made with respect to claims 1 or 28 or any of the claims that depend therefrom.

Lyon in Combination with Additional References

Claims 7, 10-11, 14 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyon in view of the admitted prior art and U.S. Patent No. 6,916,902 ("Ibasekaran"). Applicant respectfully disagrees.

Neither the admitted prior art nor Ibasekaran teach or suggest a solution with a first solvent, at least one organic polymer, a second solvent and a third solvent, where the first solvent has a high solubility and a faster evaporation rate than the second solvent, the second solvent has a very low solubility, and the third solvent has a surface tension less than 30 dynes/cm and is less than about twenty weight percent of the solution. For at least this reason, applicant submits that no *prima facie* case of obviousness has been made with respect to claims 7, 10-11, 14 and 34.

Applicant respectfully requests withdrawal of the obviousness rejections.

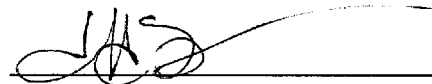
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Respectfully submitted,

Date: May 7, 2007



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